Needham Senior Center Site Feasibility Study Needham, Massachusetts June 18, 2010

SITE PLAN STUDIES NARRATIVE

The site plan narratives accompany the attached drawing schemes and explain why they were explored or what they are demonstrating. More options are shown for the Greene's Field site because of inherent potential of the parcel in respect to access and parking. Options for Rosemary Hill and Ridge Hill are more limited due to the steep topography and the buildable zone (as agreed upon with Conservation Commission) respectively. Once a preferred site is selected and the site approach is defined, the building design can follow and be developed in due design process.

Greene's Field

The various site plans explore what the impact on Greene's Field is if a building were to be located somewhere on the site. The focus of the study was to explore how to use a minimum of the open space and preserve as much of the existing open space as possible.

The final site plan options explore a) which end of the site is best for the senior center; at Great Plain Avenue (Option 1, 2 and 3) or by the Stephen Palmer House (Option 4 and 5) and b) how to locate the required parking. Option 1, 3 and 4 show surface parking and Option 2 and 5 rely on underground structured parking.

Option 4 and 5 locate the senior center where the existing playground is at the north end of the site and maintain the green space opening onto Great Plain Avenue. This location allows for potential expansion onto Stephen Palmer House site in the future should that become an option. The parking lot entry and exit onto

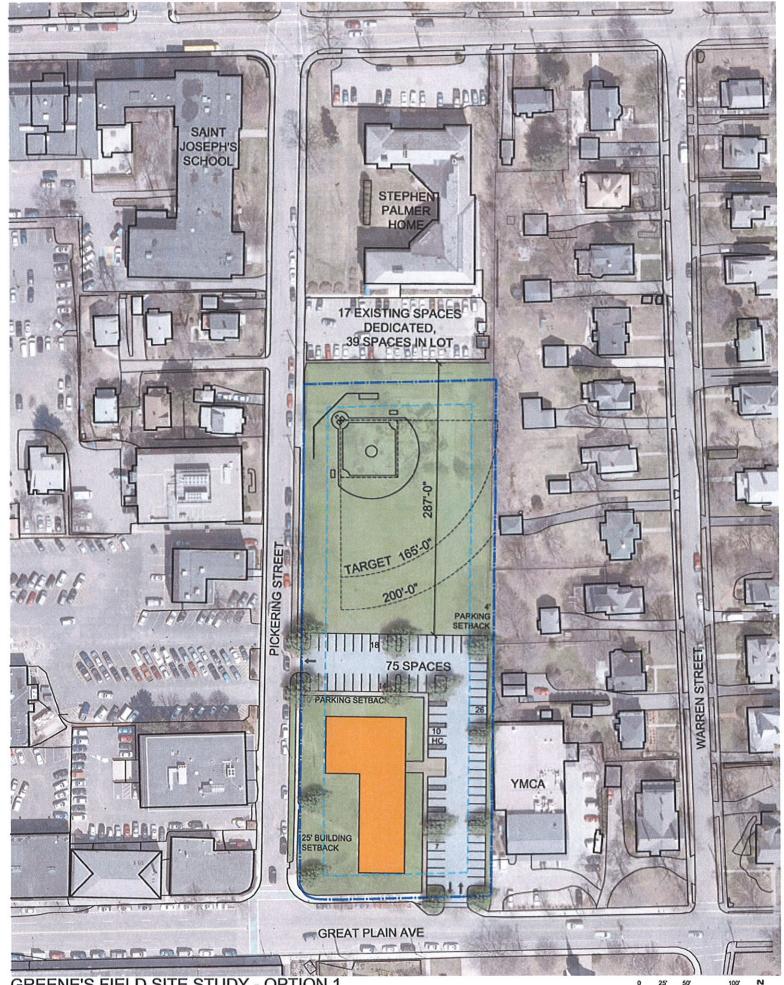


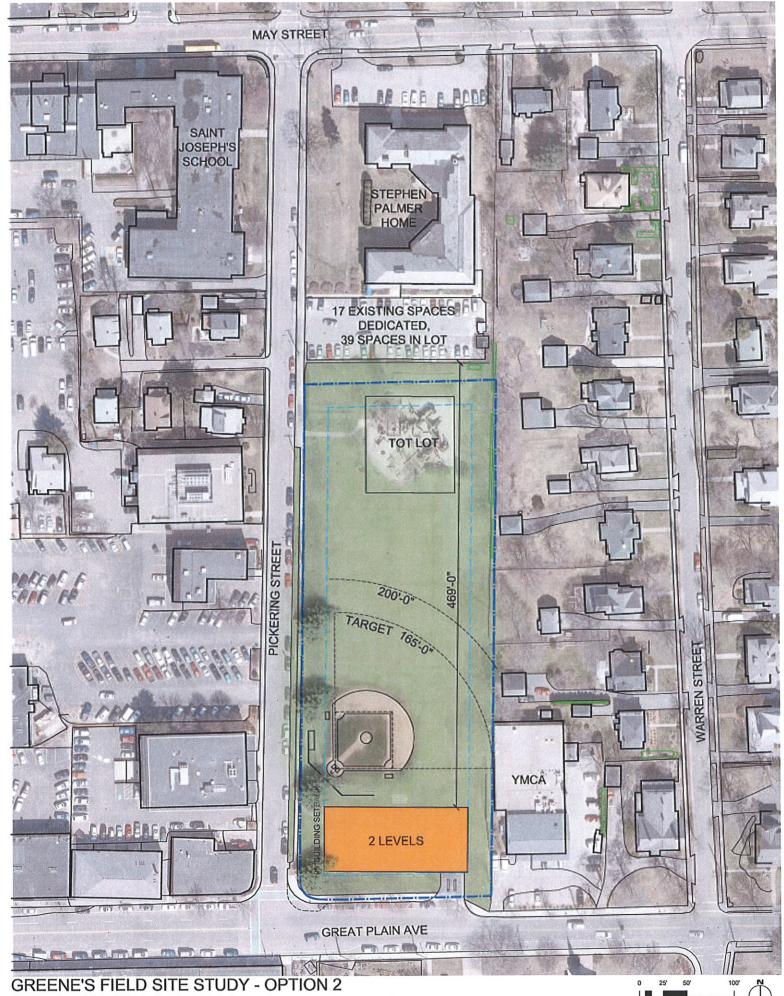
Pickering Street, adjacent to the school, is in a congested zone when school lets out in the afternoon. The problems can be mitigated by slightly widening Pickering Street to create a typical street width and possibly creating a bus drop-off zone at the school.

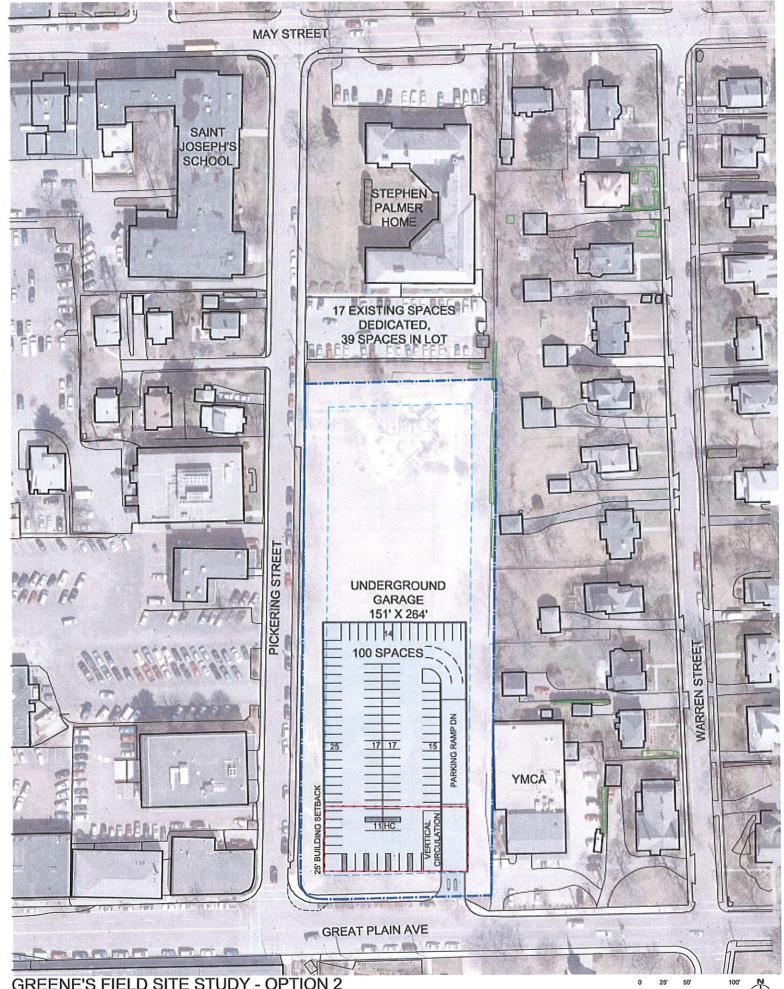
Option 1, 2 and 3 have the building at the Great Plain Avenue end of the site and have the potential for mitigating some of the school traffic issues. These options additionally explore how parking can be accommodated; the L-shaped building in Option 1 shields the parking from some views and allows entry or exit from both Great Plain Avenue and Pickering Street. An underground parking structure as shown in Option 2 would preserve most of the open space and would be accessed from Great Plain Avenue. With a garage, most parking would be below grade except for overflow and dedicated parking that currently exists at the Stephen Palmer House or on street. For the options fronting Great Plain Avenue, aligning the buildings with the adjacent downtown buildings along Great Plain Avenue (towards Town Hall) would provide more open space. This alignment is more compatible with the street context. However, it is not allowed by the zoning bylaw and would require a zoning change (not a variance).

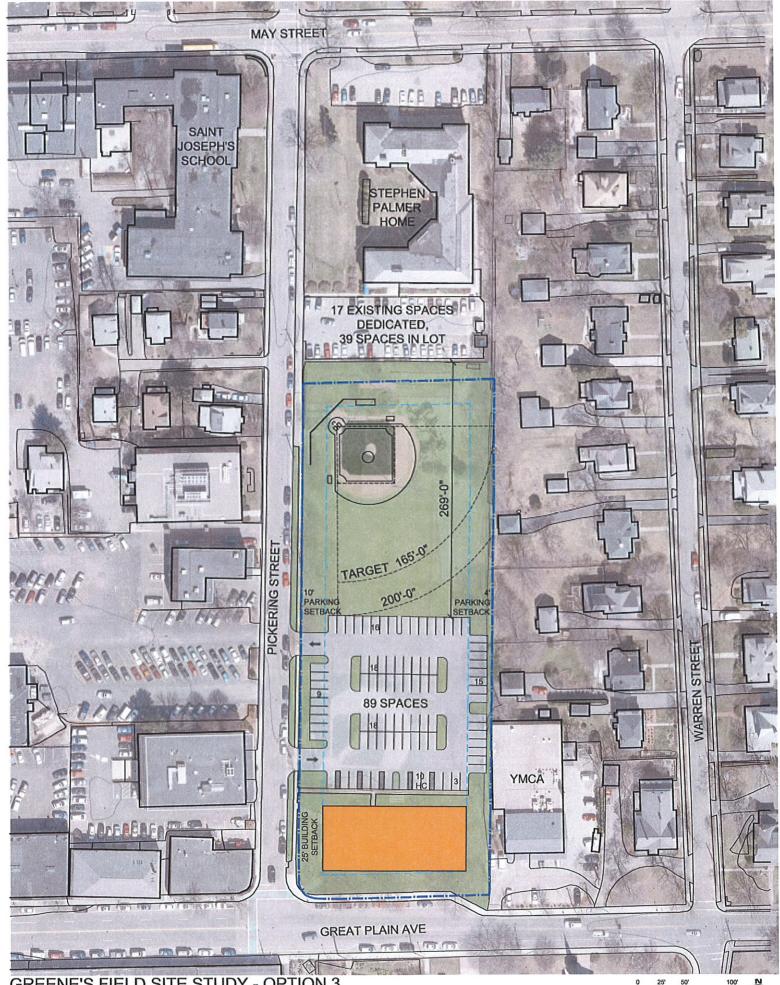
Regardless of the location of the senior center or the parking arrangement, the Greene's field site will require a zoning change to allow for two buildings on a single site. The Stephen Palmer House is in non-compliance relative to site coverage and allowable FAR. Its site is automatically merged with Greene's field into a single parcel. Town Meeting will have to vote on a zoning change to allow for two buildings on a single site. Having a merged site (as shown in Option 4 and 5) allows the center senior to be as close to the Stephen Palmer House as possible and leaves the largest amount of the field open.

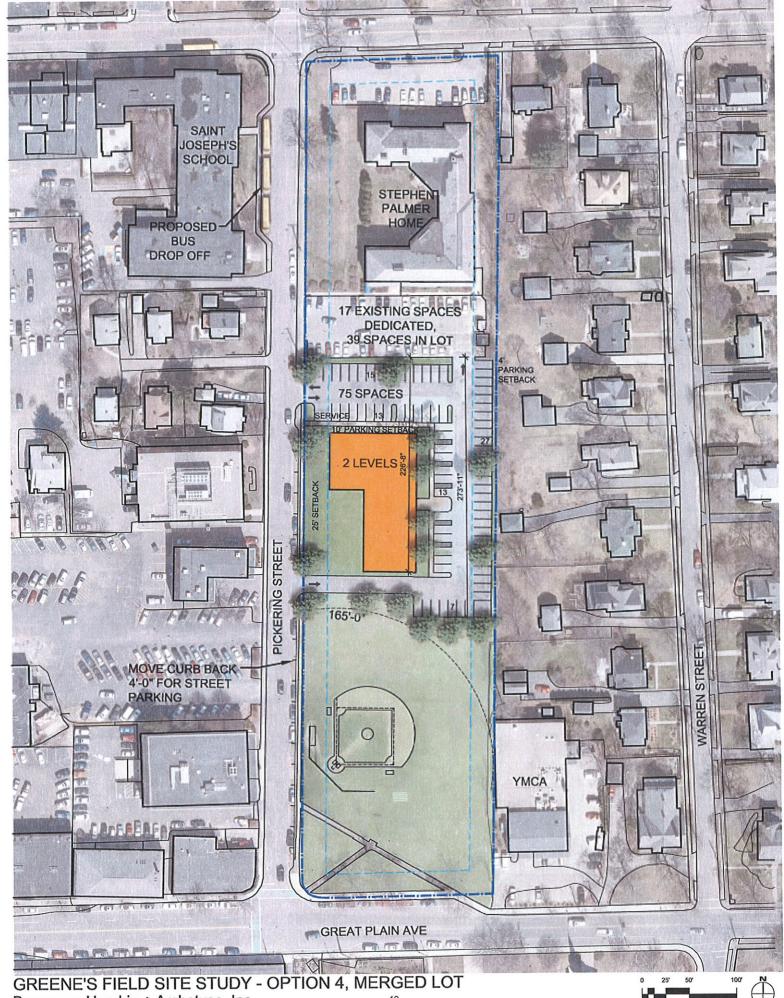




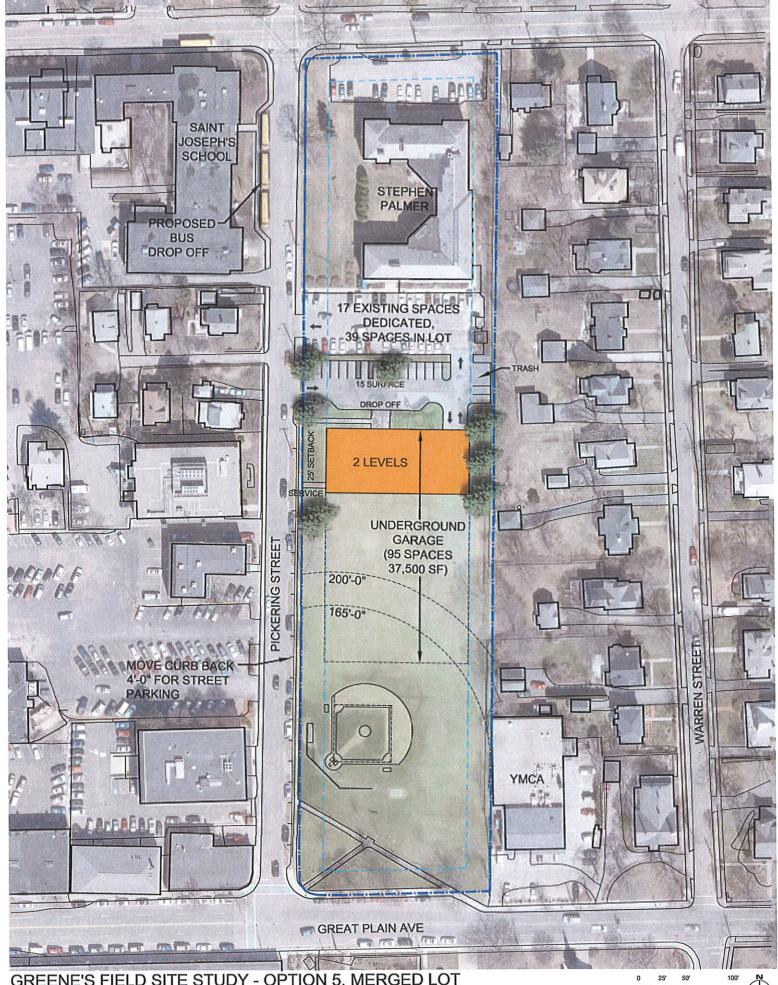












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Rosemary Hill

The site plan studies for this site explore how to utilize a steeply sloped site for the senior center. It is roughly a 30ft drop from Rosemary Street to the existing parking area by the lake. Each contour on the drawings represents a two foot grade change.

Unique to this site is the requirement to provide additional parking spaces because of the need to accommodate pool user parking during the summer. The pool requires 125 parking spaces according to the Recreation Department. These are mostly required in the afternoon when the senior center will not be fully populated so some shared parking is achievable. However, 175 spaces will be required here, a great many of them below grade in structured parking.



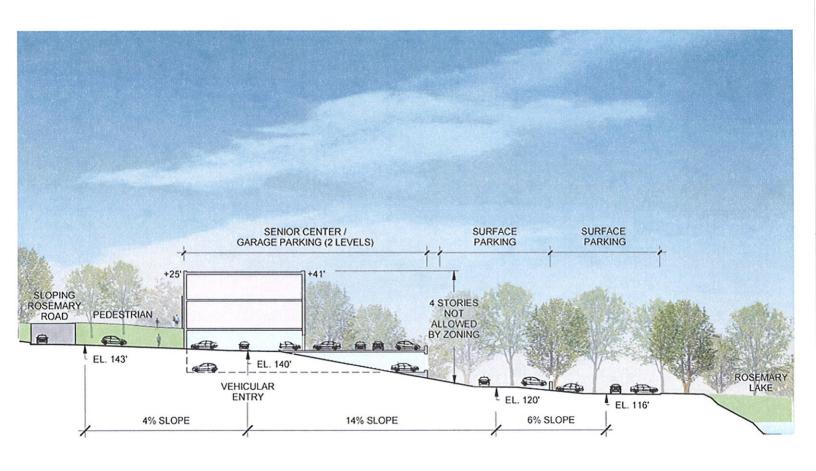
The options explore where the building can be best located and how many stories results from the different arrangements taking into account the need for more parking spaces than either Greene's field or Ridge Hill. Option 1 is a two story building located "lower" on the site in at the current parking lot, an area that is already disturbed. The analysis showed that vehicular access will be relatively difficult for drivers and pedestrians due to the steep slope. The advantage of this option however is the parking structure uses the access road for its ramp and there is no internal ramp. This saves cost. The down side of this is that parking during peak occupancy can be more frustrating because one cannot internally connect levels. This scheme was ultimately rejected due to the steep access grade and the more favorable conditions of the second option.

Option 2 located the building closer to Rosemary Street so that vehicular and pedestrian access is easier. The pedestrian entry is at the sidewalk grade. The vehicular entry is twelve feet lower and enters into the garage with minimal grading on the access road. The garage is two levels with internal circulation between the two levels. This option provides the opportunity for a single story senior center. Overflow parking and pool parking is accommodated in the two lots outside of the building footprint. Service access for deliveries and trash is an issue requiring additional study.

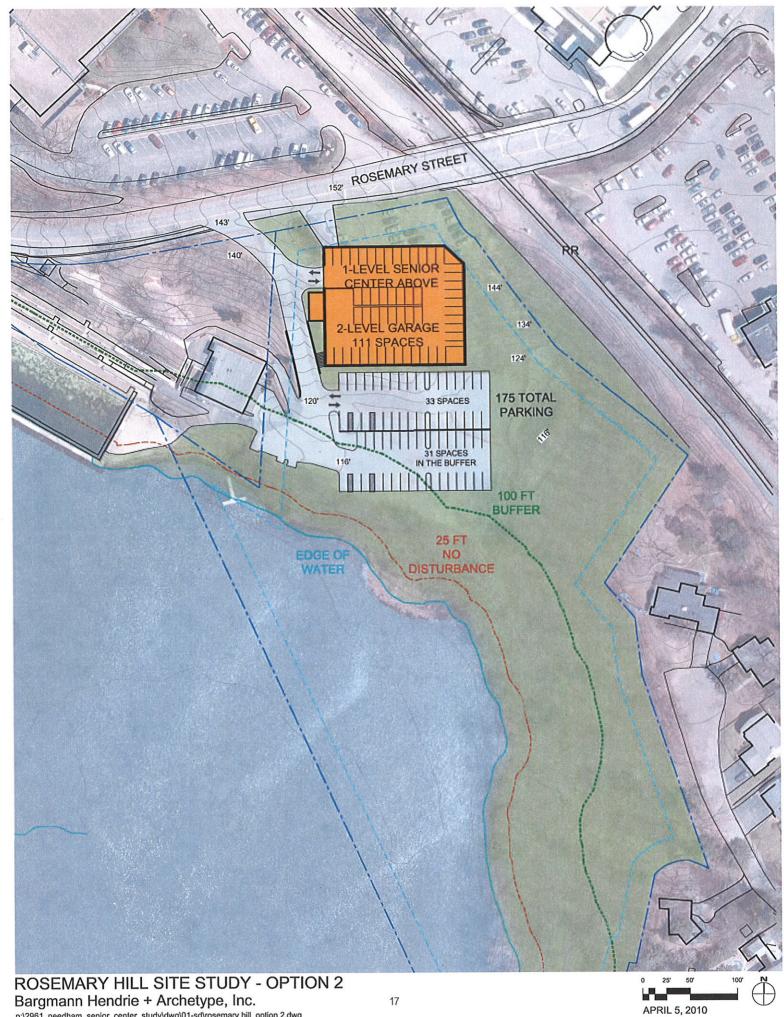
The Rosemary Hill site will require a zoning change to allow for two buildings on a single site. The existing pool building is non-conforming with regards to its side yard setback. Like Greene's field, the remedy is to merge sites with the proposed senior center site through Town Meeting vote.

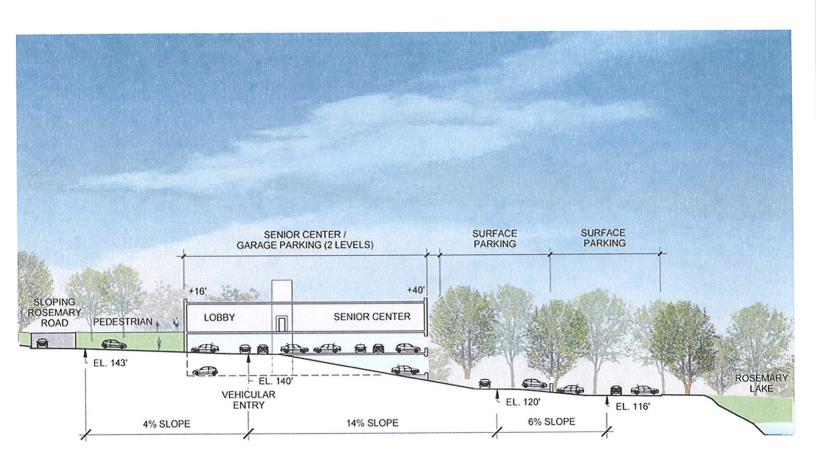
Conservation regulations related to construction near "water bodies" and wetlands appear capable of being resolved and the construction of this project can fix existing poor stormwater conditions. However, due to the limited flat area to work with stormwater management on this site will add to the project cost.





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Ridge Hill

There is not a design solution for the biggest objection to this site, its remoteness from the center of Needham. The approach of the study was to look at the site from a different perspective from the 2007 study in order to see if other attractions could make this a desired site and overcome the objections about location. Opportunities on Ridge Hill include the access to the surrounding natural preserve, cross indoor/outdoor programming, exercise programming and large outdoor event programming. Due to the relatively flat topography and site openness, the building design is also the least constrained of the three sites.



This site is in Needham's "aquifer protection district". Zoning bylaws for this district will only permit the senior center to be an addition to the existing house. A new freestanding senior center is not an allowed use. To consider the latter will require a zoning change (not a variance). A new building would not have to adhere to the floor to floor height of the existing house which would be a limiting factor for a new building with heating and cooling systems and other services that reside in the ceiling space. These are factors that the older house did not have to address when it was constructed.

The study for this site explores how to relate the new senior center to the two existing accessory buildings on the site and to create space for outdoor activities and future expansion. This results in a linear scheme on the north-south axis of the site (the "ridge") as opposed to the wrap-around scheme from the previous study. This linear approach preserves more of the western tree line and allows for future expansion to the east side of the senior center.

Two options explored various site access and parking arrangements, while the building is essentially the same. In fact, the footprint is configured such that the decision about whether this is an addition to the existing house or a new structure can be deferred (the footprints are similar). Option 1 brings the road up to the side/front of the building while the Option 2 creates a "scenic road" at the edge of the meadow that enters into a parking lot at the "back side" of the building. (In the latter condition, the road would be below the floor level of the house so that views would not be dominated by the access road.) The advantage of scheme two is that open space is preserved on the east side of the house for use by the seniors and for future expansion. Having this space as green as opposed to paved would result in a nice exterior use space and projects the image of the site as an ensemble of New England estate structures.

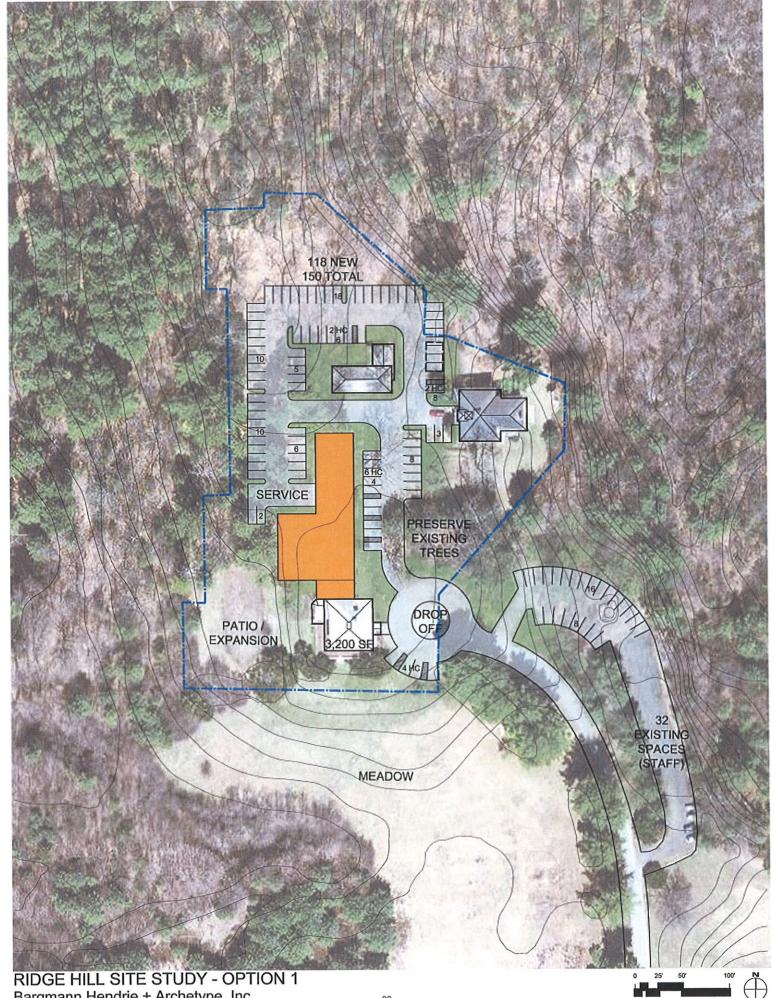
Both options allow continued use of the existing three bay garage by the recreation department for summer senior or youth programs. The barn would also be used to store equipment for the outdoor programs. These uses would be accessory to the senior center and thus, do not require zoning changes allowing multiple buildings on a single lot. Both options study preservation of the tree grove in the middle of the site (east side) and preservation of existing open space on the west side of the house. The tree grove preservation is worthy of further study.

Construction of new utilities and widening of the existing narrow access road from Charles River Street are unique factors affecting cost on this site.

Of course, the wrap-around scheme from the previous study could also be retained if this site is the preferred one.

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Bargmann Hendrie + Archetype, Inc.



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